

A. CLASSIFICATION OF SUBJECT MATTER

INV. C12N15/11 C12N5/10 A61K38/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

C12N A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, MEDLINE, WPI Data, CHEM ABS Data, Sequence Search

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	LIM K M ET AL: "Induction of marked apoptosis in mammalian cancer cell lines by antisense DNA treatment to abolish expression of DENN (differentially expressed in normal and neoplastic cells)." MOLECULAR CARCINOGENESIS, vol. 35, no. 3, November 2002 (2002-11), pages 110-126, XP002449020 ISSN: 0899-1987	13
Y	page 111, paragraphs ANTISENSE, ODNS page 125 ----- -/--	1-23

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

3 September 2007

Date of mailing of the international search report

17/09/2007

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Mabit, Hélène

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	LIM KAH M ET AL: "Antisense abrogation of DENN expression induces apoptosis of leukemia cells in vitro, causes tumor regression in vivo and alters the transcription of genes involved in apoptosis and the cell cycle." INTERNATIONAL JOURNAL OF CANCER, vol. 109, no. 1, 10 March 2004 (2004-03-10), pages 24-37, XP002449021 ISSN: 0020-7136	13
Y	page 34 page 35, paragraph 1	1-23
T	MULHERKAR N ET AL: "MADD/DENN splice variant of the IG20 gene is necessary and sufficient for cancer cell survival" ONCOGENE, vol. 25, no. 47, October 2006 (2006-10), pages 6252-6261, XP002449022 ISSN: 0950-9232	
T	MULHERKAR NIRUPAMA ET AL: "MADD/DENN splice variant of the IG20 gene is a negative regulator of caspase-8 activation - Knockdown enhances trail-induced apoptosis of cancer cells" JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 282, no. 16, April 2007 (2007-04), pages 11715-11721, XP002449023 ISSN: 0021-9258	
A	WO 2005/037303 A (TRUSTEES OF THE UNIVERSITY OF [US]; PRABHAKAR BELLUR S [US]) 28 April 2005 (2005-04-28)	
A	AL-ZOUBI A M ET AL: "Contrasting effects of IG20 and its splice isoforms, MADD and DENN-SV, on tumor necrosis factor alpha-induced apoptosis and activation of caspase-8 and -3" JOURNAL OF BIOLOGICAL CHEMISTRY, AMERICAN SOCIETY OF BIOLOCHEMICAL BIOLOGISTS, BIRMINGHAM,, US, vol. 276, no. 50, 14 December 2001 (2001-12-14), pages 47202-47211, XP002317870 ISSN: 0021-9258 figure 1	